

Abstract

An oil separator for use in a vehicle air system includes a recycling valve for removing coalesced oil. The recycling valve may include a piston movable in a cylinder in response to a control air pressure to open the recycling valve and thus drain coalesced oil from a sump under the influence of residual air pressure in the sump. The separator may include a fixture for mounting the separator to a vehicle, including a plurality of ports extending from an inlet port for directing air into the cartridge with a combined flow area at least equal to the flow area of the inlet port. The plurality of ports preferably extend at a right angle to the direction of flow of air through the inlet port. A safety relief valve on the separator releases air when the pressure exceeds a predetermined pressure.